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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,431	01/10/2001	Bruce G. Lindsay	CA9-2000-0014/1851P	8483

7590 01/29/2003

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[REDACTED] EXAMINER

LY, ANH

ART UNIT	PAPER NUMBER
2172	5

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/757,431	LINDSAY ET AL.
	Examiner	Art Unit
	Anh Ly	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 January 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 15-55 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u>4</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____   |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-14, drawn to query processing or searching the index for the selected key value, classified in class 707, subclass 3.
  - II. Claims 15-24, 31-37 and 44-46, drawn to data structure as pushdown technique, classified in class 705, subclass 5.
  - III. Claims 25-30, 38-43 and 50-55, drawn to predicate check or query processing, classified in class 707, subclass 2.
2. The inventions are distinct, each from the other because of the following reasons:  
Inventions in Group I, Group II and Group III are related as sub-combinations discloses as usable together in a single combination. The sub-combinations are distinct from each other if they are shown to be separately usable. In the instant case, the invention in Group I has separate utility from invention Group II and Group III. Group I related to a given searching index data processing, Group II related to data structure by using push-down technique and Group III related to a predicate check or query processing. (see MPEP 806.05(d)).
3. Because the inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Joseph Sawyer, Jr. (Reg. No. 30,801), on Wednesday, 01/15/2003 @ 2:45PM, a provisional election was made **without traverse** to prosecute the invention of Group I, searching the index for selected key value, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-55 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Claims 1-14 are pending in this application.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in–
  - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,009,425 issued to Mohan.

With respect to claims 1 and 8, Mohan discloses in response to a data manager (abstract, col. 7, lines 34-38) call to locate a data identifier in an index (col. 8, lines 21-24), corresponding to a selected key value (col. 6, lines 32-34), performing the step of locating the data identifier in the index for the selected key value (); and continuing to carry out the index-data fetch for another data identifier (col. 8, lines 21-23), if there is another data identifier for the selected key value in the index (col. 6, lines 49-63), and the index manager receives a specific condition from the data manager (col. 8, lines 28-32).

With respect to claims 2 and 9, Mohan discloses determining whether the data specified by the data identifier is to be returned to a runtime; and allowing the data manager to locate the data specified by the identifier and make a determination (see fig, 5c and col. 13, lines 8-23; also see col. 8, lines 28-36 and lines 53-57).

With respect to claims 3 and 10, Mohan discloses wherein the determination involves determining whether a predicate check or a data consuming operation on the data are possible (col. 14, lines 65-67 and col. 15, lines 1-8).

With respect to claims 4 and 11, Mohan discloses wherein the predicate check or the data consuming operation is performed if it is possible to perform the predicate

check or the data consuming operation and a specific condition is returned to the index manager (col. 15, lines 1-22).

With respect to claims 5 and 12, Mohan discloses a no data return condition (col. 15, lines 22-35).

With respect to claims 6 and 13, Mohan discloses wherein the index comprises a plurality of pages having index nodes and the method further comprises the steps of allowing the index manager to stabilize a page containing a node to be accessed in the index to locate the data identifier for the selected key value wherein the index manager does not release the stabilization of the page during a callback to the data manager (abstract, col. 9, lines 12-30 and col. 12, lines 41-60).

With respect to claims 7 and 14, Mohan discloses determining if one of the set of access processes is waiting for an exclusive latch for accessing the index (col. 15, lines 45-55); utilizing the index manager to copy the data identifier and key value from the index if there is such an access process (col. 12, lines 41-60); and releasing stabilization of any pages in the index prior to any callback to the data manager (col. 9, lines 35-45 and col. 12, lines 41-60).

### Contact Information

9. Any inquiry concerning this communication should be directed to Anh Ly whose telephone number is (703) 306-4527 or via E-Mail: ANH.LY@USPTO.GOV. The examiner can be reached on Monday – Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 746-7238 (after Final Communication)

or: (703) 746-7239 (for formal communications intended for entry)

or: (703) 746-7240 (for informal or draft communications, or Customer Service Center, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

AL  
Jan 23<sup>rd</sup>, 2003.

*mbar*  
HOSAIN T. ALAM  
PRIMARY EXAMINER